49-47-12Ø

XTO ENERGY

July 26, 2018

Semiannual HH Compliance and Deviation Report
1H2018, January 1, 2018 – June 30, 2018
Uintah County, UT

Tracking: 1Z6T36713597768265

Ms. Alexis North
U.S. EPA – Enforcement Division
1595 Wynkoop (8P-AR)
Denver, CO 80202

Dear Ms. North:

XTO Energy, Inc. (XTO) hereby submits the Semi-annual HH Compliance and Deviation Report for January 1, 2018 – June 30, 2018. The reports satisfies the regulatory reporting requirements in 40 CFR 63.775 (b)(6), (e)(1), and (e)(2); 40 CFR 63.10(d)(5)(i); and 40 CFR 63.10 (e)(3)(vi) for the following major source facilities:

- Tap-5 Facility
- Little Canyon Facility
- River Bend Dehydration Facility

Should you have any questions regarding this submittal, please feel free to contact me by phone at 832-625-0106 or by email at ethan_boor@xtoenergy.com.

Sincerely,

Ethan Boor
Environmental Engineer
XTO Energy, Inc

WCA/encl

EPA United States Environmental Protection Agency

CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS (CTAC)

This form must be completed, signed by the "Responsible Official" designated for the facility or emission unit, and sent with each submission of documents (i.e., application forms, updates to applications, reports, or any information required by a part 70 or 71 permit).

A. Responsible Official

Name: (Last) **Hermann** (First) **Timothy** (MI) **L**

Title **XTO Energy Inc. - Manager of MSO Western Division Operations**

Street or P.O. Box **22777 Springwoods Village Pkwy**

City **Spring** State **TX** ZIP **77389** -

Telephone **(832) 625-0125** Ext. _____ Facsimile

B. Certification of Truth, Accuracy and Completeness (to be signed by the responsible official).

I certify under penalty of law that this document and all attachments were prepared under my supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Name (signed) Timothy Hermann

Name (typed) **Timothy L. Hermann** Date: 7/26 **2018**

INSTRUCTIONS FOR CTAC
CERTIFICATION OF TRUTH, ACURACY, and COMPLETENESS

This form is for the responsible official to certify that submitted documents (i.e., permit applications, updates to application, reports, and any other information required to be submitted as a condition of a permit) are true, accurate, and complete.

This form should be completed and submitted with each set of documents sent to the permitting authority. It may be used at time of initial application, at each step of a phased application submittal, for application updates, as well as to accompany routine submittals required as a term or condition of a permit.

Section A - Title V permit applications must be signed by a responsible official. The definition of responsible official can be found at ' 70.2.

Section B - The responsible official must sign and date the certification of truth, accuracy and completeness. This should be done after all application forms are complete and the responsible official has reviewed the information. Normally this would be the last form completed before the package of forms is mailed to the permitting authority.

Summary Report – Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance – *40 CFR 63.10(e)(3)(vi)*

Compliance Report Required Information – 40 CFR 63.10 (e)(3)(vi) (A) – (M):

(A) **Company name and address of the affected source** –*XTO Energy Inc. 22777 Springwoods Village Pkwy. Spring, TX 77380.*

(B) **Identification of each hazardous air pollutant (HAP) monitored at the affected source** – *Monitored data is performed on the dehydrator still vent emission control device and includes the Thermal Oxidizer combustion temperature which correlates to the minimum 95% VOC-HAP destruction efficiency required by the regulation. No direct measurement of emissions is required to be performed.*

(C) **Beginning and ending dates of the reporting period** – *January 1, 2018 – June 30, 2018.*

(D) **Brief description of the process units** – *Please refer to the attached Table 2.*

(E) **Emission and operating parameter limitations** – *The emissions are limited to a 95% by weight or greater reduction of the mass content of total HAP within the controlled gas emissions stream as specified in 40 CFR 63.771 (d)(1)(i)(A).*

(F) **Monitoring equipment manufacturer and model number** – *Manufacturer: Fluke Digital Multifunction Process Calibrator; Model Number: 725EX*

(G) **Date of the latest CMS certifications or audit** – *The CPMS equipment was verified to be operational from the date of installation and was certified by the manufacturer. The equipment utilized to monitor the thermal oxidizer combustion temperature consist of a Type K thermocouple and a Honeywell relay processor that cannot be calibrated in the field and are certified to maintain calibration until the device experiences a mechanical failure.*

(H) **Total operating time of the affected source during the reporting period** - *Please refer to the attached Tables 1-3.*

(I) **Emission data summary** – *Please refer to the attached Tables 1-3 and see description below.*

- Total duration of excess emissions during the reporting period.
- Total duration of excess emissions expressed as a percent of the total source operating time during the reporting period.
- Breakdown of the total duration of excess emissions during the reporting period according to which are startup/shutdown, control equipment problems. Process problems, other known causes and other unknown causes.

Summary Report – Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance – *40 CFR 63.10(e)(3)(vi)*

(J) **CMS performance summary** – *Please refer to the attached Tables 1-3.*

- Total CMS downtime during the reporting period.
- Total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period.
- Breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes and other unknown causes.

(K) **Description of any changes in CMS, processes or controls since the last reporting period.** – *No changes in CMS, processes or controls occurred during this reporting period.*

(L) **The report shall consist of a letter containing the name, title, and signature of the responsible official certifying accuracy** – *Please refer to the attached CTAC form.*

(M) **Date of the report** – *July 30, 2018.*

Periodic Startup, Shutdown, and Malfunction Reports – 40 CFR 63.775 (b)(6) and 40 CFR 63.10(d)(5)(i);
Periodic Reports - 40 CFR 63.775 (e)(1) and (e)(2);

Compliance Report Required Information – *Information required for the Periodic Reports is contained in the attached Tables 1-3, and as follows:*

(A) **40 CFR 63.775 (b)(6) – Startup, shutdown, and malfunction reports specified in §63.10(d)(5) shall be submitted as required . Separate startup, shutdown, and malfunction reports as described in §63.10(d)(5) are not required if the information is included in the Periodic Report specified in paragraph (e) of this section.** – *The reports are the same and have been combined into one. Please refer to the attached Tables 1-3.*

(B) **40 CFR 63.775 (e)(2)(ii)(D) – For each excursion caused by the lack of monitoring data, as specified in §63.773(d)(6)(iv), the report must include the data and duration of the period that the excursion occurred.** – Any e*xcursions that are caused by the lack of monitoring data, as described in 40 CFR 63.773(d)(6)(iv), are addressed by following the procedures in the SSMP: Verification of compliance during these periods of data loss involved inspecting the emission control equipment on a daily basis and manually recording the applicable monitored value. This procedure is done to ensure that the control device was operating within acceptable limits during the absence of continuous electronic monitoring data.*

Please refer to the Summary Report, Section (I) above for further details and the attached Tables 1-5.

(C) **40 CFR 63.10(d)(5)(i)** – *The malfunctions described in the attached Table 4 and Table 5 that produced excess emissions followed the procedures and associated actions stated in the SSMP in order to minimize emissions during the events. The applicable SSMP procedures are as follows:*

- *Respond within a timely manner upon notification or alarm that the device is in malfunction mode (based on operational parameter malfunction criteria).*
- *Survey the malfunction situation, cause, and the current site conditions.*
- *Based on the initial survey, determine if the conditions permit the safe startup and operation of the device.*
- *If the decision is made to restart the device, conduct the manufacturer's recommended startup procedure as stated in the applicable O&M manual, soon as possible.*
- *If the device cannot be restarted, then notify the appropriate supervisor and conduct a site shutdown assessment under the direction of the appropriate supervisor.*
- *Record any site daily operating parameters that are available and that can be used to demonstrate the operating state of equipment during the malfunction period. Examples of site daily operating parameters that may be recorded include station gas flow rate, compressor downtime and catalyst conditions, and T.O. operating temperature and waste gate bypass mode.*
- *Collect any data that may be stored locally on the PLC or other local data storage device to use for future reference.*
- *Complete all applicable downtime and malfunction logs.*

Please refer to the Summary Report, Section (I) above for further details and the attached Tables 1-3, Table 4, and Table 5.

Tap 5 Thermal Oxidizer

XTO Energy - Roosesvelt, UT

01/01/2018 - 06/30/2018

NO CPMS ISSUES ARE REPORTED FOR THE MONITORING PERIOD FOR THIS SOURCE

Table 1 - Tap 5 Compressor Station Thermal Oxidizer (TO-1)

Tap 5 Thermal Oxidizer (TO-1) Total Source Operating Time	**4269.75**	**Hours**
Excess Emissions		
Startup/Shutdown	0.00	Hours
Control Equipment Problems	0.50	Hours
Process Problems	0.00	Hours
Other Known Causes	0.00	Hours
Unknown Causes	0.00	Hours
Total Excess Emissions Downtime	**0.50**	**Hours**
Total Excess Emissions Downtime Expressed As A % Of The Total Source Operating Time	**0.01%**	
CPMS		
Monitoring Equipment Malfunction	0.00	Hours
Non-Monitoring Equipment Malfunction (Communication Equipment Malfunction)	0.25	Hours
Quality Assurance/Quality Control Calibration	0.00	Hours
Other Known Causes	0.00	Hours
Other Unknown Causes	0.00	Hours
Total CPMS Downtime	**0.25**	**Hours**
Total CPMS Downtime Expressed As A Percent Of The Total Source Operating Time	**0.01%**	

Little Canyon Thermal Oxidizer

XTO Energy - Roosevelt, UT
01/01/2018 - 06/30/2018

NO EXCESS EMISSIONS OR CPMS ISSUES ARE REPORTED FOR THE MONITORING PERIOD FOR THIS SOURCE

Table 2 - Little Creek Unit (LCU) Compressor Station Thermal Oxidizer (TO-1)

Tap 5 Thermal Oxidizer (TO-1) Total Source Operating Time	**4360.50**	**Hours**
Excess Emissions		
Startup/Shutdown	0.00	Hours
Control Equipment Problems	0.00	Hours
Process Problems	0.00	Hours
Other Known Causes	0.00	Hours
Unknown Causes	0.00	Hours
Total Excess Emissions Downtime	**0.00**	**Hours**
Total Excess Emissions Downtime Expressed As A % Of The Total Source Operating Time	**0.00%**	
CPMS		
Monitoring Equipment Malfunction	0.00	Hours
Non-Monitoring Equipment Malfunction (Communication Equipment Malfunction)	0.00	Hours
Quality Assurance/Quality Control Calibration	0.00	Hours
Other Known Causes	0.00	Hours
Other Unknown Causes	0.00	Hours
Total CPMS Downtime	**0.00**	**Hours**
Total CPMS Downtime Expressed As A Percent Of The Total Source Operating Time	**0.00%**	

Riverbend Dehy Thermal Oxidizer

XTO Energy - Roosevelt, UT

01/01/2018 - 06/30/2018

NO EXCESS EMISSIONS OR CPMS ISSUES ARE REPORTED FOR THE MONITORING PERIOD FOR THIS SOURCE

Table 3 - River Bend Unit (RBU) Dehy Compressor Station Thermal Oxidizer (TO-1)

Tap 5 Thermal Oxidizer (TO-1) Total Source Operating Time	**4357.50**	**Hours**
Excess Emissions		
Startup/Shutdown	0.00	Hours
Control Equipment Problems	0.00	Hours
Process Problems	0.00	Hours
Other Known Causes	0.00	Hours
Unknown Causes	0.00	Hours
Total Excess Emissions Downtime	**0.00**	**Hours**
Total Excess Emissions Downtime Expressed As A % Of The Total Source Operating Time	**0.00%**	
CPMS		
Monitoring Equipment Malfunction	0.00	Hours
Non-Monitoring Equipment Malfunction (Communication Equipment Malfunction)	0.00	Hours
Quality Assurance/Quality Control Calibration	0.00	Hours
Other Known Causes	0.00	Hours
Other Unknown Causes	0.00	Hours
Total CPMS Downtime	**0.00**	**Hours**
Total CPMS Downtime Expressed As A Percent Of The Total Source Operating Time	**0.00%**	

Uintah County CPMS Evaluation

XTO Energy - Roosevelt, UT

01/01/2018 - 06/30/2018

Table 4 - Dehydrator Thermal Oxidizer Equipment Logsheet and CPMS Evaulation Results

STATION NAME	TITLE V LOCATION / STATION? (YES / NO)	DEHYDRATOR #	CONTROL DEVICE FOR REGENERATOR HAP/VOC EMISSIONS	CONTROL DEVICE EFFICIENCY	THERMAL OXIDIZER SIZE	THERMAL OXIDIZER CPMS SYSTEM CHANGES / MAINTENANCE / MODIFICATIONS		
						Was the TO CPMS operating properly during verification check? (Yes / No)	Were there any corrections / adjustments / modifications required during verification? (Yes / No)	2018 Verification Date
Tap 5	Yes	T5D-1	TO	>95%	30 IN TO	Yes	No	18-Jul-18
Little Canyon	Yes	LCD-1	TO	>95%	36 IN TO	Yes	No	18-Jul-18
River Bend Dehy	Yes	RBD-1	TO	>95%	48 IN TO	Yes	No	18-Jul-18

Uintah County HH Deviations

XTO Energy - Roosevelt, UT

01/01/2018 - 06/30/2018

Table 5 - 1H2018 Uintah County HH Deviations / Excess Emissions Events

Reported Date	Equipment Description/Model	Serial No.	Remarks
7/30/2018	Tap 5 Compressor Station Thermal Oxidizer (TO-1)	N/A	Two (2) instances of TO combustion temperatures less than 1300 degrees F occurred during the semi-annual monitoring period while the dehydrator was in operation. Because XTO followed the SSMP and each event was within the allowed compliance time, the instances did not constitute a reportable deviation. Refer to the Appendix B for details of each emission event.
7/30/2018	Little Canyon Unit (LCU) Compressor Station Thermal Oxidizer (TO-1)	N/A	None - Temperature remained between 1300 - 1800 degrees F at atll times when the TO was operational during entire reporting period. No deviations for the reporting period.
7/30/2018	River Bend Unit (RBU) Dehy Compressor Station Thermal Oxidizer (TO-1)	N/A	None - Temperature remained between 1300 - 1800 degrees F at atll times when the TO was operational during entire reporting period. No deviations for the reporting period.

APPENDIX A

Thermal Oxidizer Downtime Data

Tap 5 Thermo Oxidizer - Downtime

XTO Energy - Roosesvelt, UT

01/01/2018 - 06/30/2018

Facility ID	Equipment ID	Event Start Date	Event Start Time	Event End Date	Event End Time	Days	Hours	Minutes	Event Type	Issue Type	SSM Code	Corrective Action Comments
Tap5	Comp_2	01/04/2018	11:15:00	01/04/2018	13:15:00	0	2	0	Planned	Equipment	MAINT	PM unit.
Tap5	Comp_2	01/04/2018	14:30:00	01/04/2018	14:45:00	0	0	15	Unplanned	Equipment	MISC	Change card in PLC.
Tap5	Comp_2	01/06/2018	22:30:00	01/06/2018	23:30:00	0	1	0	Unplanned	Equipment	HDP	High 3rd stage discharge pressure. Restarted.
Tap5	Comp_2	01/14/2018	12:30:00	01/14/2018	13:00:00	0	0	30	Unplanned	Equipment	HDP	Tap 5 booster 2 down for repair of oil leak on engine.
Tap5	Comp_2	01/18/2018	21:15:00	01/18/2018	22:30:00	0	1	15	Unplanned	Equipment	HDP	High 3rd stage discharge pressure due to Tap 5 Booster down.
Tap5	Comp_2	01/24/2018	12:00:00	01/24/2018	12:15:00	0	0	15	Unplanned	Equipment	HDP	High discharge pressure due to Tap 5 B2 down.
Tap5	Comp_2	02/01/2018	12:15:00	02/01/2018	14:30:00	0	2	15	Planned	Equipment	MAINT	PM unit.
Tap5	Comp_2	02/20/2018	00:45:00	02/20/2018	02:00:00	0	1	15	Unplanned	Equipment	HDP	High 3rd stage discharge pressure. Tap 5 Booster 2 down sue to frozen check valve on discharge line.
Tap5	Comp_2	02/20/2018	07:15:00	02/20/2018	07:45:00	0	0	30	Unplanned	Equipment	HDP	High 3rd stage discharge pressure. Tap 5 Booster 2 down sue to frozen check valve on discharge line.
Tap5	Comp_2	02/20/2018	08:00:00	02/20/2018	09:00:00	0	1	0	Unplanned	Equipment	HSP	High 3rd stage discharge pressure. Tap 5 Booster 2 down sue to frozen check valve on discharge line.
Tap5	Comp_2	02/21/2018	01:15:00	02/21/2018	03:00:00	0	1	45	Unplanned	Equipment	HDP	High 3rd stage discharge pressure. Sales line frozen. Air to ESD valve on T5B2 frozen.
Tap5	Comp_2	02/21/2018	03:45:00	02/21/2018	04:15:00	0	0	30	Unplanned	Equipment	HDP	High 3rd stage discharge pressure. Sales line frozen. Air to ESD valve on T5B2 frozen.
Tap5	Comp_2	02/21/2018	04:30:00	02/21/2018	06:30:00	0	2	0	Unplanned	Equipment	HDP	High 3rd stage discharge pressure. Sales line frozen. Air to ESD valve on T5B2 frozen.
Tap5	Comp_2	02/21/2018	06:45:00	02/21/2018	07:15:00	0	0	30	Unplanned	Equipment	HDP	High 3rd stage discharge pressure. Sales line frozen. Air to ESD valve on T5B2 frozen.
Tap5	Comp_2	02/22/2018	10:45:00	02/22/2018	11:45:00	0	1	0	Unplanned	Equipment	HDP	High 3rd stage discharge pressure as Tap 5 Booster 2 is down due to frozen recirc. valve.
Tap5	Comp_2	02/24/2018	05:30:00	02/24/2018	07:30:00	0	2	0	Unplanned	Equipment	HDP	High 3rd stage discharge pressure. Closed louvers on cooler. Reset and start.
Tap5	Comp_2	03/01/2018	10:00:00	03/01/2018	11:45:00	0	1	45	Planned	Equipment	MOM	PM Unit Restart
Tap5	Comp_2	03/12/2018	09:15:00	03/12/2018	09:30:00	0	0	15	Unplanned	Equipment	HST	R&R
Tap5	Comp_2	03/29/2018	15:45:00	03/29/2018	16:15:00	0	0	30	Unplanned	Equipment	HST	Auto Reset & Restart
Tap5	Comp_2	04/05/2018	09:45:00	04/05/2018	12:00:00	0	2	15	Planned	Equipment	MOM	PM unit.
Tap5	Comp_2	04/12/2018	11:00:00	04/12/2018	11:45:00	0	0	45	Unplanned	Equipment	HSL	High 3rd stage scrubber level. Restarted.
Tap5	Comp_2	04/14/2018	21:30:00	04/15/2018	07:30:00	0	10	0	Unplanned	Equipment	VFD	Program in new VFD.
Tap5	Comp_2	04/16/2018	11:30:00	04/16/2018	15:00:00	0	2	30	Planned	Equipment	MISC	MSO shutdown for PRV testing.
Tap5	Comp_2	04/17/2018	08:30:00	04/17/2018	13:45:00	0	5	15	Planned	Equipment	HDP	High 3rd stage discharge pressure due to testing PRV's at T5-B2.
Tap5	Comp_2	04/28/2018	19:30:00	04/29/2018	08:00:00	0	12	30	Unplanned	Equipment	LDP	Reset & Start
Tap5	Comp_2	04/29/2018	14:30:00	04/29/2018	15:00:00	0	0	30	Unplanned	Equipment	LDP	Low 2nd stage discharge pressure. Reset and start.
Tap5	Comp_2	04/30/2018	13:00:00	04/30/2018	13:15:00	0	0	15	Unplanned	Equipment	MISC	Fix loose wires.
Tap5	Comp_2	05/01/2018	12:30:00	05/01/2018	12:45:00	0	0	15	Unplanned	Equipment	LDP	Low 2nd stage discharge pressure. Changed 2nd stage pressure transducer.
Tap5	Comp_2	05/01/2018	13:45:00	05/01/2018	14:00:00	0	0	15	Unplanned	Equipment	LDP	Low 2nd stage discharge pressure. Changed 2nd stage pressure transducer.
Tap5	Comp_2	05/03/2018	10:15:00	05/03/2018	14:00:00	0	3	45	Planned	Equipment	MAINT	PM unit.
Tap5	Comp_2	05/25/2018	14:15:00	05/25/2018	14:30:00	0	0	15	Unplanned	Equipment	HST	Restarted.
Tap5	Comp_2	06/04/2018	15:15:00	06/04/2018	15:30:00	0	0	15	Unplanned	Equipment	HDT	High 3rd Stage Discharge Pressure, Reset & Restart
Tap5	Comp_2	06/04/2018	16:00:00	06/04/2018	16:15:00	0	0	15	Unplanned	Equipment	HDP	High 3rd Stage Discharge Pressure, Reset & Restart
Tap5	Comp_2	06/04/2018	15:30:00	06/04/2018	16:15:00	0	0	45	Unplanned	Equipment	HDP	High 2nd Stage Discharge Pressure, Reset & Restart
Tap5	Comp_2	06/04/2018	16:30:00	06/04/2018	17:00:00	0	0	30	Unplanned	Equipment	HDP	High 2nd Stage Discharge Pressure, Reset & Restart
Tap5	Comp_2	06/05/2018	07:30:00	06/05/2018	09:15:00	0	1	45	Planned	Equipment	HDP	High 3rd stage discharge pressure due to PM on T5B2.
Tap5	Comp_2	06/12/2018	02:00:00	06/12/2018	04:45:00	0	2	45	Unplanned	Equipment	LCL	Bad wires. Repaired wiring.
Tap5	Comp_2	43264	06:00:00	43265	14:00:00	1	8	0	Unplanned	Equipment	MOM	Down for top end overhaul, head replacement.
Tap5	Comp_2	06/23/2018	14:15:00	06/23/2018	14:30:00	0	0	15	Planned	Equipment	MOM	Testing Tank Kills
Tap5	Comp_2	06/29/2018	06:30:00	06/29/2018	07:15:00	0	0	45	Unplanned	Equipment	LCL	Added coolant, reset and restart.

Little Canyon Thermo Oxidizer Downtime

XTO Energy - Roosevelt, UT

01/01/2018 - 06/30/2018

Facility ID	Equipment ID	Event Start Date	Event Start Time	Event End Date	Event End Time	Column3	Column4	Column5	Event Type	SSM Code	Corrective Action Comments
LC	TO_1	06/23/2018	09:45:00	06/23/2018	11:45:00	2	0		Unplanned	POW	Loss of Power, Capstone down, R&R
LC	TO_1	06/23/2018	14:45:00	06/23/2018	17:15:00	2	30		Unplanned	POW	Loss of Power, Capstone down, R&R
LC	TO_1	06/23/2018	17:30:00	06/23/2018	17:45:00	0	15		Unplanned	POW	Loss of Power, Capstone down, R&R
LC	TO_1	06/28/2018	12:15:00	06/28/2018	14:00:00	1	45		Planned	MOM	Replace thermocouple / probe, communication wires.
LC	TO_1	06/29/2018	09:15:00	06/29/2018	10:15:00	1	0		Unplanned	MOM	Fixed wiring.

Riverbend Dehy. Thermo Oxidizer Downtime

XTO Energy - Roosevelt, UT

01/01/2018 - 06/30/2018

Equipment ID	Event Start Date	Event Start Time	Event End Date	Event End Time	Event Time Diff	Event Type	SSM Code	Corrective Action Comments
TO_1	01/04/2018	14:00:00	01/04/2018	14:00:00	0d 0h 0m	Unplanned	HST	Restart.
TO_1	02/01/2018	14:15:00	02/01/2018	14:30:00	0d 0h 15m	Unplanned	GA	Inlet separator dump stuck. Restarted
TO_1	03/08/2018	11:30:00	03/08/2018	11:45:00	0d 0h 15m	Unplanned	HSP	R&R
TO_1	03/21/2018	08:45:00	03/21/2018	09:00:00	0d 0h 15m	Unplanned	HST	Restarted.
TO_1	04/06/2018	18:45:00	04/06/2018	19:00:00	0d 0h 15m	Unplanned	COM	Data glitch. Data missing in data logger.
TO_1	04/26/2018	14:15:00	04/26/2018	14:30:00	0d 0h 15m	Unplanned	HST	Auto Restart
TO_1	04/27/2018	13:30:00	04/27/2018	13:45:00	0d 0h 15m	Unplanned	HST	Auto Restart
TO_1	04/27/2018	15:00:00	04/27/2018	15:30:00	0d 0h 30m	Unplanned	HST	Auto Restart
TO_1	04/27/2018	17:30:00	04/27/2018	17:45:00	0d 0h 15m	Unplanned	HST	Auto Restart
TO_1	05/05/2018	15:00:00	05/05/2018	15:15:00	0d 0h 15m	Unplanned	HST	Restarted.
TO_1	05/07/2018	12:00:00	05/07/2018	12:30:00	0d 0h 30m	Planned	MOM	PRV testing.
TO_1	05/08/2018	15:45:00	05/08/2018	16:00:00	0d 0h 15m	Unplanned	HST	Restarted.
TO_1	05/08/2018	18:45:00	05/08/2018	19:00:00	0d 0h 15m	Unplanned	HST	Restarted
TO_1	05/09/2018	16:45:00	05/09/2018	17:15:00	0d 0h 30m	Unplanned	HST	Restarted.
TO_1	05/24/2018	14:15:00	05/24/2018	14:30:00	0d 0h 15m	Unplanned	HST	Restarted.
TO_1	05/25/2018	13:30:00	05/25/2018	13:45:00	0d 0h 15m	Unplanned	HST	Restarted
TO_1	05/30/2018	13:15:00	05/30/2018	13:30:00	0d 0h 15m	Unplanned	HST	Auto Reset & Start
TO_1	05/30/2018	15:15:00	05/30/2018	15:45:00	0d 0h 30m	Unplanned	HST	Auto Reset & Start
TO_1	06/03/2018	15:30:00	06/03/2018	16:00:00	0d 0h 30m	Unplanned	HTT	Restart.
TO_1	06/11/2018	15:45:00	06/11/2018	16:00:00	0d 0h 15m	Unplanned	HST	Restarted.
TO_1	06/12/2018	15:15:00	06/12/2018	15:30:00	0d 0h 15m	Unplanned	HST	Restarted.
TO_1	06/12/2018	17:45:00	06/12/2018	18:00:00	0d 0h 15m	Unplanned	HST	Restarted.
TO_1	06/13/2018	13:30:00	06/13/2018	14:00:00	0d 0h 30m	Unplanned	HST	Restarted.
TO_1	06/13/2018	15:15:00	06/13/2018	15:45:00	0d 0h 30m	Unplanned	HST	Restarted.
TO_1	06/14/2018	14:15:00	06/14/2018	14:30:00	0d 0h 15m	Unplanned	HST	Restarted.
TO_1	06/14/2018	16:45:00	06/14/2018	17:00:00	0d 0h 15m	Unplanned	HST	Restarted.
TO_1	06/21/2018	15:30:00	06/21/2018	15:45:00	0d 0h 15m	Unplanned	HST	Auto R&R
TO_1	06/23/2018	14:00:00	06/23/2018	14:15:00	0d 0h 15m	Planned	MOM	Testing Tank Kills

Riverbend Dehy. Thermo Oxidizer Downtime

XTO Energy - Roosevelt, UT

01/01/2018 - 06/30/2018

TO_1	06/25/2018	15:00:00	06/25/2018	15:30:00	0d 0h 30m	Unplanned	HST	Restarted.
TO_1	06/25/2018	17:30:00	06/25/2018	17:45:00	0d 0h 15m	Unplanned	HST	Restarted.
TO_1	06/26/2018	13:45:00	06/26/2018	14:00:00	0d 0h 15m	Unplanned	HST	Restarted.
TO_1	06/26/2018	16:00:00	06/26/2018	16:15:00	0d 0h 15m	Unplanned	HST	Restarted.
TO_1	06/26/2018	18:15:00	06/26/2018	18:30:00	0d 0h 15m	Unplanned	HST	Restarted.
TO_1	06/27/2018	12:30:00	06/27/2018	12:45:00	0d 0h 15m	Unplanned	HST	Restarted.
TO_1	06/27/2018	15:15:00	06/27/2018	15:30:00	0d 0h 15m	Unplanned	HST	Restarted.

APPENDIX B

Thermal Oxidizer Combustion Temperature Data

Tap 5 Thermo Oxidizer Runtime

Roosevelt - Thermal Oxidizer Data Report

1/1/2018 12:00:00 AM - 7/1/2018 12:00:00 AM

Site Name	DateTime	Equipment	Waste Valve	TO Temperature	Dehy Status	Reason for Downtime	Resolution
Tap 5	2018-06-10 08:15	Thermal Oxidizer PLC 1	1	1472	392		
Tap 5	2018-06-10 08:30	Thermal Oxidizer PLC 1	1	1452	393		
Tap 5	2018-06-10 08:45	Thermal Oxidizer PLC 1	1	1463	399		
Tap 5	2018-06-10 09:00	Thermal Oxidizer PLC 1	1	1485	398		
Tap 5	2018-06-10 09:15	Thermal Oxidizer PLC 1	1	1474	401		
Tap 5	2018-06-10 09:30	Thermal Oxidizer PLC 1	1	1453	401		
Tap 5	2018-06-10 09:45	Thermal Oxidizer PLC 1	1	1461	395		
Tap 5	2018-06-10 10:00	Thermal Oxidizer PLC 1	1	1490	404		
Tap 5	2018-06-10 10:15	Thermal Oxidizer PLC 1	1	1482	402		
Tap 5	2018-06-10 10:30	Thermal Oxidizer PLC 1	1	1470	398		
Tap 5	2018-06-10 10:45	Thermal Oxidizer PLC 1	1	1458	385		
Tap 5	2018-06-10 11:00	Thermal Oxidizer PLC 1	1	1463	397		
Tap 5	2018-06-10 11:15	Thermal Oxidizer PLC 1	1	1455	404		
Tap 5	2018-06-10 11:30	Thermal Oxidizer PLC 1	1	1461	394		
Tap 5	2018-06-10 11:45	Thermal Oxidizer PLC 1	1	1482	391		
Tap 5	2018-06-10 12:00	Thermal Oxidizer PLC 1	1	1465	387		
Tap 5	2018-06-10 12:15	Thermal Oxidizer PLC 1	1	1449	395		
Tap 5	2018-06-10 12:30	Thermal Oxidizer PLC 1	1	1464	399		
Tap 5	2018-06-10 12:45	Thermal Oxidizer PLC 1	1	1468	402		
Tap 5	2018-06-10 13:00	Thermal Oxidizer PLC 1	1	1467	404		
Tap 5	2018-06-10 13:15	Thermal Oxidizer PLC 1	1	1469	400		
Tap 5	2018-06-10 13:30	Thermal Oxidizer PLC 1	1	1483	398		
Tap 5	2018-06-10 13:45	Thermal Oxidizer PLC 1	1	1469	397		
Tap 5	2018-06-10 14:00	Thermal Oxidizer PLC 1	1	1469	402		
Tap 5	2018-06-10 14:15	Thermal Oxidizer PLC 1	1	1476	397		
Tap 5	2018-06-10 14:30	Thermal Oxidizer PLC 1	1	1473	392		
Tap 5	2018-06-10 14:45	Thermal Oxidizer PLC 1	1	1467	399		
Tap 5	2018-06-10 15:00	Thermal Oxidizer PLC 1	1	1457	391		
Tap 5	2018-06-10 15:15	Thermal Oxidizer PLC 1	1	1463	393		
Tap 5	2018-06-10 15:30	Thermal Oxidizer PLC 1	1	1469	392		
Tap 5	2018-06-10 15:45	Thermal Oxidizer PLC 1	1	1453	391		
Tap 5	2018-06-10 16:00	Thermal Oxidizer PLC 1	1	1464	393		
Tap 5	2018-06-10 16:15	Thermal Oxidizer PLC 1	1	1463	398		
Tap 5	2018-06-10 16:30	Thermal Oxidizer PLC 1	1	1486	396		
Tap 5	2018-06-10 16:45	Thermal Oxidizer PLC 1	1	1468	399		
Tap 5	2018-06-10 17:00	Thermal Oxidizer PLC 1	1	1467	400		
Tap 5	2018-06-10 17:15	Thermal Oxidizer PLC 1	1	1484	403		
Tap 5	2018-06-10 17:30	Thermal Oxidizer PLC 1	1	1482	401		
Tap 5	2018-06-10 17:45	Thermal Oxidizer PLC 1	1	1492	393		
Tap 5	2018-06-10 18:00	Thermal Oxidizer PLC 1	1	1475	398		
Tap 5	2018-06-10 18:15	Thermal Oxidizer PLC 1	1	1477	396		
Tap 5	2018-06-10 18:30	Thermal Oxidizer PLC 1	1	1477	403		
Tap 5	2018-06-10 18:45	Thermal Oxidizer PLC 1	1	1472	401		
Tap 5	2018-06-10 19:00	Thermal Oxidizer PLC 1	1	1461	393		
Tap 5	2018-06-10 19:15	Thermal Oxidizer PLC 1	1	1477	392		
Tap 5	2018-06-10 19:30	Thermal Oxidizer PLC 1	1	1467	395		
Tap 5	2018-06-10 19:45	Thermal Oxidizer PLC 1	1	1281	400	Data Communication Errors.	System Reset.
Tap 5	2018-06-10 20:00	Thermal Oxidizer PLC 1	1	1474	398		
Tap 5	2018-06-10 20:15	Thermal Oxidizer PLC 1	1	1489	392		
Tap 5	2018-06-10 20:30	Thermal Oxidizer PLC 1	1	1465	401		
Tap 5	2018-06-10 20:45	Thermal Oxidizer PLC 1	1	1483	393		
Tap 5	2018-06-10 21:00	Thermal Oxidizer PLC 1	1	1500	394		
Tap 5	2018-06-10 21:15	Thermal Oxidizer PLC 1	1	1475	395		
Tap 5	2018-06-10 21:30	Thermal Oxidizer PLC 1	1	1466	396		
Tap 5	2018-06-10 21:45	Thermal Oxidizer PLC 1	1	1469	386		
Tap 5	2018-06-10 22:00	Thermal Oxidizer PLC 1	1	1479	393		
Tap 5	2018-06-10 22:15	Thermal Oxidizer PLC 1	1	1478	402		
Tap 5	2018-06-10 22:30	Thermal Oxidizer PLC 1	1	1470	393		
Tap 5	2018-06-10 22:45	Thermal Oxidizer PLC 1	1	1490	385		
Tap 5	2018-06-10 23:00	Thermal Oxidizer PLC 1	1	1487	395		
Tap 5	2018-06-10 23:15	Thermal Oxidizer PLC 1	1	1465	400		
Tap 5	2018-06-10 23:30	Thermal Oxidizer PLC 1	1	1477	395		
Tap 5	2018-06-10 23:45	Thermal Oxidizer PLC 1	1	1464	390		
Tap 5	2018-06-11 00:00	Thermal Oxidizer PLC 1	1	1471	389		
Tap 5	2018-06-11 00:15	Thermal Oxidizer PLC 1	1	1525	385		
Tap 5	2018-06-11 00:30	Thermal Oxidizer PLC 1	1	1471	391		
Tap 5	2018-06-11 01:00	Thermal Oxidizer PLC 1	1	1480	394		
Tap 5	2018-06-11 01:15	Thermal Oxidizer PLC 1	1	1517	394		
Tap 5	2018-06-11 01:30	Thermal Oxidizer PLC 1	0	631	396		

Tap 5 Thermo Oxidizer Runtime

Roosevelt - Thermal Oxidizer Data Report

1/1/2018 12:00:00 AM - 7/1/2018 12:00:00 AM

Site Name	DateTime	Equipment	Waste Valve	TO Temperature	Dehy Status	Reason for Downtime	Resolution
Tap 5	2018-06-11 01:45	Thermal Oxidizer PLC 1	1	1461	397		
Tap 5	2018-06-11 02:00	Thermal Oxidizer PLC 1	1	1488	401		
Tap 5	2018-06-11 02:15	Thermal Oxidizer PLC 1	1	1461	400		
Tap 5	2018-06-11 02:45	Thermal Oxidizer PLC 1	1	1453	394		
Tap 5	2018-06-11 03:15	Thermal Oxidizer PLC 1	1	1425	389		
Tap 5	2018-06-11 03:30	Thermal Oxidizer PLC 1	0	839	398		
Tap 5	2018-06-11 04:00	Thermal Oxidizer PLC 1	0	1164	400		
Tap 5	2018-06-11 04:15	Thermal Oxidizer PLC 1	0	796	398		
Tap 5	2018-06-11 04:30	Thermal Oxidizer PLC 1	0	622	392		
Tap 5	2018-06-11 04:45	Thermal Oxidizer PLC 1	0	507	387		
Tap 5	2018-06-11 05:00	Thermal Oxidizer PLC 1	0	435	389		
Tap 5	2018-06-11 05:15	Thermal Oxidizer PLC 1	0	370	397		
Tap 5	2018-06-11 05:30	Thermal Oxidizer PLC 1	0	318	403		
Tap 5	2018-06-11 05:45	Thermal Oxidizer PLC 1	0	726	396		
Tap 5	2018-06-11 06:00	Thermal Oxidizer PLC 1	0	1263	386		
Tap 5	2018-06-11 06:15	Thermal Oxidizer PLC 1	1	1363	390		
Tap 5	2018-06-11 06:30	Thermal Oxidizer PLC 1	0	935	399		
Tap 5	2018-06-11 06:45	Thermal Oxidizer PLC 1	0	695	401		
Tap 5	2018-06-11 07:00	Thermal Oxidizer PLC 1	1	1490	389		
Tap 5	2018-06-11 07:15	Thermal Oxidizer PLC 1	1	1469	390		
Tap 5	2018-06-11 07:30	Thermal Oxidizer PLC 1	0	953	399		
Tap 5	2018-06-11 07:45	Thermal Oxidizer PLC 1	1	2498	401		
Tap 5	2018-06-11 08:00	Thermal Oxidizer PLC 1	0	747	399		
Tap 5	2018-06-11 08:15	Thermal Oxidizer PLC 1	1	1483	390		
Tap 5	2018-06-11 08:30	Thermal Oxidizer PLC 1	1	1481	392		
Tap 5	2018-06-11 08:45	Thermal Oxidizer PLC 1	1	1451	395		
Tap 5	2018-06-11 09:00	Thermal Oxidizer PLC 1	1	1471	404		
Tap 5	2018-06-11 09:15	Thermal Oxidizer PLC 1	0	824	400		
Tap 5	2018-06-11 09:30	Thermal Oxidizer PLC 1	0	530	387		
Tap 5	2018-06-11 09:45	Thermal Oxidizer PLC 1	0	383	394		
Tap 5	2018-06-11 10:00	Thermal Oxidizer PLC 1	1	2498	404		
Tap 5	2018-06-11 10:15	Thermal Oxidizer PLC 1	1	2498	384		
Tap 5	2018-06-11 10:30	Thermal Oxidizer PLC 1	1	2498	399		
Tap 5	2018-06-11 10:45	Thermal Oxidizer PLC 1	1	2498	398		
Tap 5	2018-06-11 11:00	Thermal Oxidizer PLC 1	1	2498	385		
Tap 5	2018-06-11 11:15	Thermal Oxidizer PLC 1	0	210	397		
Tap 5	2018-06-11 11:30	Thermal Oxidizer PLC 1	1	613	406	Temperature reading	Replace temperature probe.
Tap 5	2018-06-11 11:45	Thermal Oxidizer PLC 1	1	2498	384		
Tap 5	2018-06-11 12:00	Thermal Oxidizer PLC 1	0	552	397		
Tap 5	2018-06-11 12:15	Thermal Oxidizer PLC 1	1	2498	402		
Tap 5	2018-06-11 12:30	Thermal Oxidizer PLC 1	1	2498	398		
Tap 5	2018-06-11 12:45	Thermal Oxidizer PLC 1	1	1499	389		
Tap 5	2018-06-11 13:00	Thermal Oxidizer PLC 1	1	2498	388		
Tap 5	2018-06-11 13:15	Thermal Oxidizer PLC 1	1	2498	402		
Tap 5	2018-06-11 13:30	Thermal Oxidizer PLC 1	1	1507	397		
Tap 5	2018-06-11 13:45	Thermal Oxidizer PLC 1	1	1470	385		
Tap 5	2018-06-11 14:00	Thermal Oxidizer PLC 1	1	1458	404		
Tap 5	2018-06-11 14:15	Thermal Oxidizer PLC 1	1	1482	391		
Tap 5	2018-06-11 14:30	Thermal Oxidizer PLC 1	1	1485	389		
Tap 5	2018-06-11 14:45	Thermal Oxidizer PLC 1	1	1481	398		
Tap 5	2018-06-11 15:00	Thermal Oxidizer PLC 1	1	1477	401		
Tap 5	2018-06-11 15:15	Thermal Oxidizer PLC 1	1	1469	388		
Tap 5	2018-06-11 15:30	Thermal Oxidizer PLC 1	1	1457	389		
Tap 5	2018-06-11 15:45	Thermal Oxidizer PLC 1	1	1468	402		
Tap 5	2018-06-11 16:00	Thermal Oxidizer PLC 1	1	1485	404		
Tap 5	2018-06-11 16:15	Thermal Oxidizer PLC 1	1	1477	400		
Tap 5	2018-06-11 16:30	Thermal Oxidizer PLC 1	1	1462	400		
Tap 5	2018-06-11 16:45	Thermal Oxidizer PLC 1	1	1468	392		
Tap 5	2018-06-11 17:00	Thermal Oxidizer PLC 1	1	1473	387		
Tap 5	2018-06-11 17:15	Thermal Oxidizer PLC 1	1	1475	400		
Tap 5	2018-06-11 17:30	Thermal Oxidizer PLC 1	1	1472	399		
Tap 5	2018-06-11 17:45	Thermal Oxidizer PLC 1	1	1452	396		
Tap 5	2018-06-11 18:00	Thermal Oxidizer PLC 1	1	1481	387		
Tap 5	2018-06-11 18:15	Thermal Oxidizer PLC 1	1	1477	391		
Tap 5	2018-06-11 18:30	Thermal Oxidizer PLC 1	1	1458	403		
Tap 5	2018-06-11 18:45	Thermal Oxidizer PLC 1	1	1453	402		
Tap 5	2018-06-11 19:00	Thermal Oxidizer PLC 1	1	1479	392		
Tap 5	2018-06-11 19:15	Thermal Oxidizer PLC 1	1	1470	390		
Tap 5	2018-06-11 19:30	Thermal Oxidizer PLC 1	1	1472	402		
Tap 5	2018-06-11 19:45	Thermal Oxidizer PLC 1	1	1462	396		

XTO Energy Inc.
CPMS - TO

DEHYDRATOR #	CONTROL DEVICE FOR REGENERATOR HAP/VOC EMISSIONS [1]	CONTROL DEVICE EFFICIENCY	THERMAL OXIDIZER SIZE [1]	THERMAL OXIDIZER CPMS SYSTEM CHANGES / MAINTENANCE / MODIFICATIONS [2]								
				Was the TO CPMS operating properly during verification check? (Yes / No)	Were there any corrections / adjustments / modifications required during verification? (Yes / No)	2018 Verification Date	Fuel Valve Control	Fluke Reading	High Temp Kill	Fluke Reading	Fan Controll	Fluke reading
T5D-1	TO	>95%	30 IN TO	Yes	No	18-Jul-18	1449	1451	1447	1448	1445	1447
LCD-1	TO	>95%	36 IN TO	Yes	No	18-Jul-18	1609	1609	1615	1615	1612	1610
RBD-1	TO	>95%	48 IN TO	Yes	No	18-Jul-18	1442	1441	1445	1446	1450	1450

CALIBRATION TECHNICIANS & SUPPLY, INC.
Instrument Repair & Calibration Laboratory
Providing NIST Traceability
&
Instrumentation Supplies

CALIBRATION CERTIFICATE

Form N4155.01 Rev. 2	Prepared By:	JP	Approved By:	STC	Date:	9/6/2013

SUBMITTED BY: XTO ENERGY INC. CERTIFICATE#: 43195.6493

INSTRUMENT: FLUKE DIGITAL MULTIFUNCTION PROCESS CALIBRATOR

SERIAL NO: 2499101 MODEL NO: 725EX

The above instrument has been cleaned, tested and calibrated by Calibration Technicians & Supply, Inc. as per manufacturers specifications and is warranted at time of delivery only, to be at a level of accuracy traceable to NIST, with exceptions noted.
Due to the inherent characteristics of this instrument it is highly recommended that it is recalibrated within (365) days to assure the accuracy and reliability of this instrument.

The unit was received in the following condition:
IN TOLERANCE (X) OUT OF TOLERANCE ( ) PHYSICALLY DAMAGED ( )

The unit was returned in the following condition:
IN TOLERANCE (X) OUT OF TOLERANCE ( ) PHYSICALLY DAMAGED ( )

NOTES:

The following applicable calibration standards, used by Calibration Technicians & Supply, Inc. provide NIST traceability. Calibration procedures used meet or exceed the requirements of ISO/IEC 17025:2005.
This certificate may not be reproduced, except in full, without written approval from Calibration Technicians & Supply, Inc.
This certification is void if the manufacturer's instructions for use, care and maintenance are not followed.

LAB EQUIPMENT	SERIAL #	CALIBRATED	DUE DATE	NIST TRACE #
AMETEK AMC900	008485	06/16/17	06/16/19	EVL355148
AMETEK C-140	011916-00022	01/04/18	01/04/19	43104.5333
ASHCROFT DEADWEIGHT	2JH-41689	11/10/16	11/10/18	42684.5993
DHI RPM4 A20Ms-L/A7Ms-L	700	11/30/17	11/30/19	1500228967
DHI RPM4 A2Ms/A700Ks	701	09/15/16	09/15/18	1500205065
DHI RPM4 G100Ks/BG15Ks	702	12/04/17	12/04/19	1500229187
FLUKE 5500A/COIL	20081675	04/10/17	04/10/19	3D11149
FLUKE 5522A CALIBRATOR	2631901	01/04/18	01/04/20	EVL411462
HP 3457A MULTIMETER	3114A17223	07/26/17	07/26/19	3457A
HP 3458A MULTIMETER	2823A07260	09/14/16	09/14/18	1-8019481894-1
WIKA 332.34 20M GAUGE	318081-2	05/31/16	05/31/18	13630

TEMP: 68 °F BY: STEVE CICCO CAL DATE: 04/05/18
RH: 15 % DUE DATE: 04/05/19
6750 Feet Mean Sea Level Height LAB NO: 786OR

CLIENT: XTO ENERGY INC.
JOB NO: 786OR
DATE CALIBRATION
PREFORMED: 04/05/18
DATE DUE: 04/05/19

CALIBRATION DATA
METER / SIMULATOR

CALIBRATION TECHNICIANS & SUPPLY, INC.

MANUFACTURER: FLUKE SERIAL NO: 2499101 MODEL: 725EX

CALIBRATION DATA:
METHOD: AS PER MANUFACTURERS SPECIFICATIONS

The following calibration standards provide NIST traceability

TEST EQUIPMENT:	FLUKE 5522A	S/N: 2631901	CAL DATE: 01/04/18
TEST EQUIPMENT:	HP 3458A MULTI-METER	S/N: 2823A07260	CAL DATE: 09/14/16
TEST EQUIPMENT:		S/N:	CAL DATE:
TEST EQUIPMENT:		S/N:	CAL DATE:
TEST EQUIPMENT:		S/N:	CAL DATE:
TEST EQUIPMENT:		S/N:	CAL DATE:

CALIBRATION:

RANGE SELECTED	MANUFACTURER'S TOLERANCE	INPUT VALUE	INDICATED VALUE AS FOUND	INDICATED VALUE AS LEFT
MEAS UPPER VDC	+/- 02%RDG + 2CTS	0.000 VDG	0.000 VDC	0.000 VDC
MEAS UPPER VDC	+/- 02%RDG + 2CTS	15.000 VDC	14.999 VDC	14.999 VDC
MEAS UPPER VDC	+/- 02%RDG + 2CTS	30.000 VDC	30.000 VDC	30.000 VDC
MEAS LOWER mVDC	+/- 02%RDG + 2CTS	0.00 mVDC	0.00 mVDC	0.00 mVDC
MEAS LOWER mVDC	+/- 02%RDG + 2CTS	50.00 mVDC	49.99 mVDC	49.99 mVDC
MEAS LOWER mVDC	+/- 02%RDG + 2CTS	89.00 mVDC	88.99 mVDC	88.99 mVDC
MEAS LOWER VDC	+/- 02%RDG + 2CTS	0.000 VDC	0.000 VDC	0.000 VDC
MEAS LOWER VDC	+/- 02%RDG + 2CTS	10.000 VDC	9.999 VDC	9.999 VDC
MEAS LOWER VDC	+/- 02%RDG + 2CTS	5.000 VDC	5.000 VDC	5.000 VDC
MEAS UPPER mADC	+/- 02%RDG + 2CTS	0.000 mADC	0.000 mADC	0.000 mADC
MEAS UPPER mADC	+/- 02%RDG + 2CTS	12.000 mADC	12.000 mADC	12.000 mADC
MEAS UPPER mADC	+/- 02%RDG + 2CTS	24.000 mADC	23.999 mADC	23.999 mADC

COMMENTS:

CTSI CAL BY: STEVE CICCO

TEMP: 68 °F RH: 15 % DATE: 04/05/18

P.O. Box 138 • 94 Allegiance Cr. Suite D • Evanston, WY 82931-0138 • (307) 789-0596 • Fax: (307) 789-0598

CLIENT: XTO ENERGY INC.
JOB NO: 786OR
DATE CALIBRATION
PREFORMED: 04/05/18
DATE DUE: 04/05/19

CALIBRATION DATA
METER / SIMULATOR

CALIBRATION TECHNICIANS & SUPPLY, INC.

MANUFACTURER: FLUKE SERIAL NO: 2499101 MODEL: 725EX

RANGE SELECTED	MANUFACTURER'S TOLERANCE	INPUT VALUE	INDICATED VALUE AS FOUND	INDICATED VALUE AS LEFT
SOURCE LOWER mADC	+/- .02%RDG + 2 CTS	4.0000 mADC	4.0005 mADC	4.0005 mADC
SOURCE LOWER mADC	+/- .02%RDG + 2 CTS	12.0000 mADC	12.0023 mADC	12.0023 mADC
SOURCE LOWER mADC	+/- .02%RDG + 2 CTS	20.0000 mADC	20.0041 mADC	20.0041 mADC
SOURCE LOWER mADC	+/- .02%RDG + 2 CTS	24.0000 mADC	24.0049 mADC	24.0049 mADC
SOURCE LOWER mVDC	+/- .02%RDG + 2 CTS	0.000 mVDC	0.007 mVDC	0.007 mVDC
SOURCE LOWER mVDC	+/- .02%RDG + 2 CTS	50.000 mVDC	49.997 mVDC	49.997 mVDC
SOURCE LOWER mVDC	+/- .02%RDG + 2 CTS	100.000 mVDC	100.003 mVDC	100.003 mVDC
SOURCE LOWER VDC	+/- .02%RDG + 2 CTS	0.000 VDC	0.000 VDC	0.000 VDC
SOURCE LOWER VDC	+/- .02%RDG + 2 CTS	5.000 VDC	5.001 VDC	5.001 VDC
SOURCE LOWER VDC	+/- .02%RDG + 2 CTS	10.000 VDC	10.001 VDC	10.001 VDC
SOURCE LOWER Ohms	+/- 1 Ohms	15.0 Ohms	15.0 Ohms	15.0 Ohms
SOURCE LOWER Ohms	+/- 1 Ohms	360.0 Ohms	360.0 Ohms	360.0 Ohms
SOURCE LOWER Ohms	+/- 5 Ohms	1500.0 Ohms	1500.3 Ohms	1500.3 Ohms
SOURCE LOWER Ohms	+/- 1 Ohms	3200.0 Ohms	3200.5 Ohms	3200.5 Ohms

TEMP: 68 °F RH: 15 % DATE: 04/05/18

CTSI CAL BY: STEVE CICCO

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